UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 3 0 2011

REPLY TO THE ATTENTION OF:

Don Smith, Supervisor
Air Quality Permits, Unit #3
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155

Dear Mr. Seltz:

On June 2, 2011, the U.S. Environmental Agency received notification of the Minnesota Pollution Control Agency's (MPCA) intent to issue a major modification and operating permit for re-activation of the phase 1 indurating furnace for U.S. Steel Corporation's Keetac Facility, located in Keewatin, Minnesota. This is a proposed modification (Permit No. 13700063-004) to a Prevention of Significant Deterioration (PSD) construction permit and Part 70 operating permit, in order to allow for an increase in taconite pellet production of approximately 3.6 million tons per year (tpy). Besides being a major PSD source, the source is also major under Part 70, is major for greenhouse gases (GHGs), and is a major source for hazardous air pollutants (HAPs). We appreciate the effort that MPCA has put forth in developing this proposed permit record considering GHGs are newly regulated pollutants. The draft permit proposes GHG best available control technology (BACT) to be energy efficient design of the grate-kiln with use of a 50/50 mix of natural gas and alternative renewable fuels as the primary fuel, and with a maximum of 26,100 tpy of coal allowed. The GHG BACT also includes an emission limit of 114,000 tpy of carbon dioxide (CO2) from fuel combustion on a 12-month rolling average.

We have completed our review of the draft permit and have the following comments. We provide these comments to help ensure that the project meets all federal requirements, that the permit provides all necessary information so that it is readily accessible to the public, and that the record for the permit provides adequate support for the permit decision.

1. Since CO2 is the predominate GHG for Keetac, EPA recommends that CO2 Continuous Emission Monitors (CEMS) be used on both the Down Draft Drying Zone 1 (DDD1) and the Tempered Preheat Zone (TPH) exhausts to monitor the CO2 emissions, and that appropriate fuel factors or another reliable strategy be used to account for any non-CO2 GHGs in order to create a BACT limit expressed as CO2e.

2. Although firing coal is the lowest ranked control option considered in MPCA's GHG BACT analysis for the indurating furnace, the draft permit proposes to combust up to 30% coal without providing an explanation for that decision. Please ensure that MPCA's

permitting record contains an explanation to support this part of the BACT decision. (We note that section 9.2.2 of Keetac's GHG BACT analysis provides a rationale for periodic firing of coal, which MPCA could adopt in its record and/or reference in providing its own rationale.)

3. Please note that BACT must be met at all times including during periods of startup, shutdown and malfunction. Where MPCA determines that startup and shutdown emissions cannot meet the BACT limit, secondary BACT limits or work practices for those specific periods should be established. To establish a work practice standard, the record must show that "technical or economic limitations on the application of a measurement methodology would make the imposition of an emissions standard infeasible." 40 CFR 51.166(b)(12).

4. The SO2 BACT limit for DDD1 and TPH is a single limit over two separate stacks each equipped with a dedicated SO2 CEMS. The reason for placing a single combined limit for the two stacks as opposed to having individual limits is not clear. Please ensure that the permitting record provides an explanation for the necessity of having a combined limit.

Again, we appreciate the opportunity to provide comments on this draft permit. Please feel free to contact me or have your staff contact Charmagne Ackerman, of my staff, at (312) 886-0448.

Sincerely,

Pamela Blakley

Pamela Blakley
Chief
Air Permits Section